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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

BLOUNT, ERIC

ART UNIT

PAPER NUMBER

2612

MAIL DATE

DELIVERY MODE

04/01/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/577,848	TON, FREEK	
	Examiner	Art Unit	
	ERIC M. BLOUNT	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 1 objected to because of the following informalities: in line 4, applicant includes the language: “means by means of which”. It appears that applicant has included the words “means by”, in err. Appropriate correction is required.
2. Claim 2 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. With regard to the claim, applicant includes the limitation “wherein the vehicle constitutes a motor vehicle with a chassis that is supported by **at least three wheels**”; independent claim 1 requires that the vehicle have four or more wheels.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 1-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Independent claim 1 calls for a device for avoiding traffic accidents in line 1. However, in line 3, the claim calls for a user to come in to contact with at least a part of a side of a vehicle. Examiner is unclear how an accident is avoided when a road user must come in to contact with the vehicle. It appears that an accident is signaled but not avoided, as presently claimed by the

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applicant. Further, the use of the word "can" in line 5 is indefinite. It is unclear whether the driver establishes that there is another road user in the vicinity of the side of a driver's own vehicle or if the driver is merely capable of establishing the presence of another road user.

5. Regarding claims 1, 5-7, 17, and 18, applicant claims a proximity sensor. Merriam Webster's Collegiate Dictionary defines proximity as: *the quality or state of being proximate: Closeness*. The word proximate is defined as: *very near or close*. Examiner is unclear how a pressure sensor is capable of being a proximity sensor. Applicant states that the pressure sensor detects the presence of a road user or object pressing against the side of the vehicle. The language is very clear that the road user is touching the side of vehicle and not very near or close to the side of the vehicle. Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term "proximity" in the aforementioned claims is used by the claim to mean "pressing against", while the accepted meaning is "very near or close." The term is indefinite because the specification does not clearly redefine the term.

6. Regarding claim 17, applicant claims: "Device according to claim 1, wherein the at least one proximity sensor includes: a pressure sensor by means of which the presence of a road user or object pressing against the side of the vehicle can be detected; and a radiation sensor that is sensitive to radiation by means of which the presence of a road user in the vicinity of a side of

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the vehicle can be detected.” It is unclear whether applicant is claiming a single sensor comprising two distinct sensing means, or if applicant is claiming two separate sensors.

In an effort to aide in compact prosecution, Examiner will interpret the claims as best understood.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-4, 10, 11, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Rannells, Jr. et al [US 6,264,337 B1].

With regard to **claim 1**, as best understood, Rannells discloses:

- A device for avoiding traffic accidents where at least one vehicle with four or more wheels (Figures 1A & 1B) and another type of road user are involved and where said road user comes into proximity with at least part of a side of the vehicle (column 4, lines 29-33), which vehicle is provided with means of which the presence of another road user in the vicinity of the side of the vehicle can be established by the driver of the vehicle ((column 4, lines 56-63); Rannells leaves it to the skilled artisan to decide what the other type of road user may be. One example of another type of road user may be another type of vehicle.),

- the device comprising: at least one proximity sensor (transducers) provided with said means fixed in or on the relevant side of the vehicle (column 4, lines 55-67) by means of which the presence of an object within a strip of selectable width from the side of the vehicle can be detected ((column 4, line 55 – column 5, line 14); The transducers attached to the side of the vehicle have an inherent sensing range that reads on applicant's claimed strip of selectable width.), which proximity sensor is linked to an alarm sounding device by means of which the driver can be alerted if the sensor is activated (column 5, lines 59-67).

As for **claim 2**, as best understood, in the event that applicant is able to overcome the claim objection. Rannells's vehicle shown in Figure 1A would read on the claimed limitation.

As for **claims 3 and 4**, as best understood, Rannells's vehicle shown in Figure 1A reads on applicant's claimed combination of a tractor and/or trailer coupled thereto (column 14, lines 40-48).

Regarding **claim 10**, as best understood, the sensors taught by Rannells have an inherent sensitivity which establishes the detection range of said sensors. Only objects or road users which are in range (predetermined distance) of the sensing means would cause an alarm to be generated.

As for **claim 11**, as best understood, at least one proximity sensor is at a predetermined height above the road ((column 4, line 63 - column 5, line 6) Rannells's upper and lower edge read on a predetermined height above the road. These heights are known by the driver or entity that attaches the transducers to the vehicle.).

As for **claim 15**, as best understood, Rannells discloses that the link between the at least one proximity sensor and the alarm sounding device is a wireless communication link (column 5, lines 47-63).

9. Claims 1 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Chalmers et al [US 5,408,214 A].

Regarding **claim 1**, as best understood, Chalmers discloses:

- Device for signaling traffic accidents where at least one vehicle with four or more wheels (Figure 1(a)) and another type of road user are involved and where said road user comes into contact with at least part of a side of the vehicle, which vehicle is provided with means by means of which the presence of another road user contacting the side of the vehicle can be established by the driver of the vehicle ((column 2, lines 45-63 and column 3, lines 2-17); Any surface of the vehicle, including the back (backside) is interpreted as a side of the vehicle.),
- the device comprising: at least one impact sensor provided with said means fixed in or on the relevant side of the vehicle by means of which the presence of an object within a strip of selectable width from the side of the vehicle can be detected, which proximity sensor is linked to an alarm sounding device by means of which the driver can be alerted if the sensor is activated (column 3, lines 2-17).

As for **claim 5**, the at least one sensor is a pressure sensor by means of which the presence of a road user or object pressing against the side of a vehicle can be detected (column 4, lines 33-46).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

12. Claims 8, 9, 12, and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rannells as applied to the claims above and further in view of Gunderson et al [US 6,933,837 B2].

With regard to **claim 8**, as best understood, Rannells does not specifically disclose that the at least one proximity sensor is a radiation sensor. In an analogous art, Gunderson discloses a trailer based collision warning system wherein a radiation sensor is used to detect the presence of a road user in the vicinity of a side of the vehicle (column 6, lines 30-40). Since both Rannells and Gunderson disclose devices for detecting the presence of a road user in a vicinity of the side of a vehicle it would have been obvious to one skilled in the art to substitute one known

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proximity detecting sensor for the other to achieve the predictable result of avoiding a traffic accident.

Claim 9 is interpreted and rejected using the same reasoning as claim 8 above.

Gunderson discloses an electromagnetic (radar) sensor.

Regarding **claim 12**, as best understood, Rannells does not specifically disclose that each proximity sensor is installed at a different height above the road. However, Rannells discloses that the sensors are installed at upper and lower edges of the vehicle. One having ordinary skill in the art would recognize that placement of the sensors would not change the functionality of the overall system. The important aspect of the invention is that the proximity sensors cover the entire periphery of the side of the monitored vehicle. Thus, the placement of the sensors is viewed as a mere engineering design preference.

As for **claim 16**, Rannells is silent on a transponder. Instead Rannells simply states that the communication path may be wired or wireless and is not limited in this respect (column 5, lines 47-51). This passage suggests that any known method of wireless communication might be advantageous for communicating sensor data. Transponder technology was a well known in wireless communications at the time of the present invention by the applicant. Using the suggestion of Rannells it would have been obvious to one having skill in the art to try transponder technology as the wireless communication link because the skilled artisan has good reason to pursue the known options within his or her technical grasps.

As for **claim 17**, as best understood, Gunderson discloses that a sensor may comprise a plurality of sensing means for detecting the presence of a road user (column 6, lines 47-59 and column 6, line 65-column 7, line 5).

As for **claim 18**, as best understood, Gunderson discloses that the alarm sounding device is able to sound various alarms depending on which sensor actuates the alarm (see the table in column 8).

As for **claim 19**, as best understood, the claim is interpreted and rejected using similar reasoning as claim 8 above. Gunderson discloses that a plurality of sensor types may be used to detect an object (column 6, lines 30-44). Acoustic sensors were known in the art at the time of the invention by the applicant and would have been an obvious sensor type that could be used for sensing presence.

13. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rannells as applied to the claims above, and further in view of Dodd et al [US 5,313,189 A].

With regard to **claim 13**, as best understood, Rannells discloses that the invention may be used on various types of vehicles (column 14, lines 40-49). Rannells does not disclose a motor vehicle having a safety guard at a gap between the wheels of the vehicle. In an analogous art for avoiding traffic accidents, Dodd discloses a safety guard on a side of a vehicle located at a gap between the wheels (Figures 4 & 5), wherein at least one proximity sensor is installed on the safety guard (column 1, lines 50-65 and column 3, lines 55-62). Since both Rannells and Dodd disclose systems for detecting road users or objects in the vicinity of the side of a vehicle, it would have been obvious to one having ordinary skill in the art at the time of the invention by the applicant to modify the invention of Rannells to include the safety guard detection devices in order to yield the predictable results of an increased sensing area and a means for protecting the road user or object from being run over by the vehicle.

14. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chalmers et al as applied to the claims above, and further in view of Mathevon [WO/03082639 A1].

With regards to **claims 6 and 7**, as best understood, Chalmers does not specifically disclose a pressure sensor that is pressured sensitive over an elongated surface. In analogous art, Mathevon discloses an elongate sensor in the form of a pressure tube for detecting impact (pages 4, 11, and 12). Since both Chalmers and Mathevon disclose devices for detecting impact occurring on the side of a vehicle, it would have been obvious to one having ordinary skill in the art at the time of the invention by the applicant to try the elongate sensor taught by Mathevon in the invention of Chalmers in order to yield the predictable results of a device that would warn the driver or a vehicle that an object or road user is pressing against any part of the side of the vehicle.

Conclusion

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ERIC M. BLOUNT whose telephone number is (571)272-2973. The examiner can normally be reached on Monday-Thursday 8:00 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Bugg can be reached on (571) 272-2998. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Eric M. Blount
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Art Unit 2612

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